# **Debate & Analysis**

# **James Mackenzie Lecture 2011:**

multimorbidity, goal-oriented care, and equity



## INTRODUCTION

Today we face an important demographic and epidemiological transition, confronting us with the challenge of non-communicable diseases (NCDs), which occur more and more in the context of multimorbidity. In the next decade, multimorbidity will become the rule, no longer the exception: 50% of the those aged ≥65 years have at least three chronic conditions, whereas 20% of the ≥65vear group have at least five chronic conditions.1 In the case of COPD, for example, more than half of the patients have at least one comorbid disease.2

# HOW DO WE ADDRESS PATIENTS WITH **MULTIMORBIDITY TODAY?**

In recent years, not only Western countries, but also developing countries started with disease managementprogrammes' to improve care. The design of those programmes include most frequently: strategies for case-finding, protocols describing what should be done and by whom, the importance of information and empowerment of the patient, and the definition of process- and outcomeindicators that may contribute to the monitoring of care.

Wagner has described the different components of the Chronic Care Model (CCM) as developed in the context of primary health care.3 The CCM has inspired policy makers and providers all over the world and is widely accepted in the US and Canada, Europe, and Australia. Taking into account the epidemiological transition, we are faced with the question: 'How will this approach work in a situation of multimorbidity'?

Let us illustrate this with a patient from our general practice, we call her 'Jennifer'

According to the actual guidelines, Jennifer is faced with a lot of tasks4: joint protection, aerobic exercise, muscle strengthening, a range of motion exercising, self-monitoring of blood glucose, avoiding environmental exposure that might exacerbate COPD, wearing appropriate foot wear, limiting intake of alcohol, maintaining body weight. Her medication schedule includes 11 different drugs, with a total of 20 administrations a day. The clinical tasks for the GP include vaccination, blood pressure control at all clinical visits, evaluation of selfmonitoring of blood glucose, foot examination, and laboratory tests. Moreover, referrals are needed to physiotherapy, for ophthalmologic examination, and pulmonary rehabilitation. So, Jennifer's reaction is not unexpected.

Jennifer's case clearly illustrates the need for a paradigm-shift for chronic care: from problem-oriented to goal-oriented care. In 1991, Mold and Blake<sup>5</sup> recognised that the problem-oriented model, focusing on the eradication of disease and the prevention of death, is not well suited to the management of a number of chronic illnesses. Therefore they proposed a goal-oriented approach that encourages each individual to achieve the highest possible level of health as defined by that individual. Goal-oriented care assists an individual in achieving their maximum individual health potential in line with their individually defined goals. The evaluator of success is the patient, not the physician. And what really matters for patients is their ability to function (functional status), and social participation. So, certainly in the context of multimorbidity, there is a need for a shift from 'chronic disease management' towards 'participatory patient management', with the patient at the centre of the process. For many people, giving meaning to the chronic illness process they are going through, is of the utmost importance. Safety and avoiding side-effects (not having to suffer more from the treatment than from the disease) is very important. Patients expect comprehensiveness in their care instead of fragmentation.

A recent survey of 'chronic disease management in 10 European countries6 illustrated that most of the programmes use a vertical disease-oriented approach. Although much has been learnt from vertical disease-oriented programmes, evidence suggests that better outcomes occur by addressing diseases through an integrated approach in a strong primary care system. Vertical disease-oriented programmes for HIV/AIDS, malaria, tuberculosis, and other infectious diseases foster duplication and the inefficient use of resources, produce gaps in the care of patients with multimorbidity, and

# Box 1. Jennifer

Jennifer is 75 years old. Fifteen years ago she lost her husband. She has been a patient at the practice for 15 years now. During these 15 years she has been through a difficult medical history: hip replacement surgery for osteoarthritis, hypertension, type 2 diabetes, and COPD. She lives independently at home, with some help from her youngest daughter, Elisabeth. I visit her regularly and each time she starts by saying: 'Doctor, you must help me'. Then follows a succession of complaints and feelings: sometimes it has to do with her heart, another time with lungs, then the hip, ... Each time I suggest — according to the guidelines — all sorts of examinations that do not improve her condition. Her request becomes more and more explicit, my feelings of powerlessness, inadequacy, and irritation, increase. Moreover, I have to cope with guidelines that are contradictory: for COPD she sometimes needs corticosteroids, which always worsens her diabetes control. The adaptation of the medication for the blood pressure (once too high, once too low) does not meet with her approval, and nor does my interest in her HbA10 and lung-function test results. After so many contacts, Jennifer says:

Doctor, I want to tell you what really matters to me. On Tuesday and Thursday, I want to visit my friends in the neighbourhood and play cards with them. On Saturday, I want to go the supermarket with my daughter. Foremost, I just want some peace. I do not want to continually change the therapy anymore, especially not having to do this and to do that'.

In the conversation that followed, it became clear to me how Jennifer had formulated the goals for her life. I felt challenged to identify how the guidelines could contribute to the achievement of Jennifer's goals. I have visited Jennifer with pleasure ever since. I know what she wants and how much I can (merely) contribute to her life.

# "Moreover, vertical programmes cause inequity for patients who do not have the 'right' disease."

reduce, especially in developing countries, government capacity by pulling the best healthcare workers out of the public health sector to focus on single diseases.7 Moreover, vertical programmes cause inequity for patients who do not have the 'right' disease.8 Horizontal primary care provides the opportunity for integration and addresses the problem of inequity, providing access to the care of all health problems, thereby avoiding 'inequity by disease'.9

# **NEED FOR NEW TYPES OF EVIDENCE:** MEDICAL, CONTEXTUAL, AND POLICY **EVIDENCE**

As far as medical evidence is concerned, within primary health care, we are confronted with the tension between the results of clinical research on the one hand and the needs of daily clinical practice on the other hand. 10 The available research generally does not include a representative sample of patients with respect to age and ethnic origin or comorbidity, and does not take into account the typical non-specific presentation of symptoms at an early disease stage. As the case of Jennifer (Box 1) illustrates, within primary care, questions arise on which evidence to follow in the case of multimorbidity.

If we want to take the goals of the patient into account, we need a new type of evidence: 'contextual evidence', to assist doctors in addressing the challenge of how to treat a particular patient in a specific situation. Contextual evidence deals with the principles of good doctor-patient communication to create trust in the interpersonal relationships, the exchange of pertinent information, exploration of the goals of the patient, and negotiation of treatment-related

To better understand the goals of the patients, we need new research frameworks: patients with multimorbidity will be the rule (instead of an exclusion criterion) and complexity will be embraced instead of avoided.11 The International Classification of Function (ICF)<sup>12</sup> might become as important as the International Classification of Diseases, as it provides a conceptual framework in which different domains of human functioning are defined. These domains are classified from an eco-bio-

psychosocial viewpoint by means of a list of body functions and structures, and a list of domains of activity and participation. As an individual's functioning and disability involves a context, the ICF includes a list of environmental factors and the concept of personal factors in its framework.

Finally, there is a need to enrich daily practice in primary care with more 'policy evidence', which entails efficiency and equity.

# **MULTIMORBIDITY, GOAL-ORIENTED** CARE, AND EQUITY

When implementing goal-oriented care, there may be a threat to equity, as the way goals are formulated by patients may be determined by, for example, social class. Moreover, integrating 'contextual evidence', implies the risk of taking the context for granted: people living in poverty will generally have been obliged to take on lower expectations in terms of quantity and quality of life than well-educated people. So, 'goaloriented medical care' could contribute to an increase in social inequities in health. This challenges primary healthcare providers with the question of how to deal with an 'unhealthy' and 'inequitable' context. It is obvious that this cannot be the responsibility only of primary care providers. They may have an important 'signalling' role to document and draw attention to the problems that patients are facing. This is where communityoriented primary care (COPC) comes into the picture. COPC integrates individual and population-based care, blending clinical skills of practitioners with epidemiology, preventive medicine, and health promotion.<sup>13</sup> Starting from observations in daily patient care, COPC makes a systematic assessment of healthcare needs in practice populations, identifies community health problems, systematic interventions, implements involving a target population (for example, modification of practice procedures, and improvement of living conditions), and monitoring the effect of changes to ensure that health services are improved and congruent with the needs of individual patients and of the community. COPC designs specific interventions to address priority health problems. Teams consisting of primary healthcare workers and community members assess resources and develop

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strategic plans to deal with problems that have been identified. So, COPC is an essential part of a strategy to re-orientate care towards the needs and the goals of the individual and of the community. It will help to identify the 'upstream causes' that lead to social inequities in health.14

## CONCLUSION

Approaching a patient with multimorbidity challenges both practitioners researchers. It challenges institutions for health professionals' education to train providers that are not only 'experts', or excellent 'professionals', but that are also 'change agents' that continuously improve the health system and question the reality of knowledge and care, as did James Mackenzie. It requires fundamental reflection on the individual provider-patient interaction, on the need for a paradigm-shift from problem-oriented to goal-oriented care, on the organisation of the healthcare services and the features of the health system. Most fundamentally, it will also require dialogue and communication methodologies between the health sector and people in need of health care and with other stakeholders within society involved in health care at the practice-, research-, and policy-level, in order to guarantee the essential characteristics of an effective health system: relevance, equity, quality, cost-effectiveness, sustainability, peoplecenteredness, and innovation.

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## **REFERENCES**

- 1. Anderson G, Horvath J. Chronic conditions: making the case for ongoing care. Baltimore, MD: Johns Hopkins University, 2002.
- 2. Mannino D, Thorn D, Swensen A, Holguin F. Prevalence and outcomes of diabetes, hypertension and cardiovascular disease in COPD. Eur Respir J 2008; **32(4):** 962-969.
- 3. Wagner E. Chronic disease management: what will it take to improve care for chronic illness? Eff Clin Pract 1998; 1(1): 2-4.
- 4. Boyd C, Darer J, Boult C, et al. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases. JAMA 2005; 294(6): 716-724.
- Mold J, Blake G, Becker L. Goal-oriented medical care. Fam Med 1991; 23(1): 46-51.
- Rijken M, Bekkema N. Chronic Disease Management Matrix 2010: results of a survey in ten European countries. Utrecht, the Netherlands: Netherlands Institute For Health Services Research, 2011.
- De Maeseneer J, van Weel C, Egilman D, et al. Funding for primary health care in developing countries. BMJ 2008; 336(7643): 518-519.
- De Maeseneer J, Roberts R, Demarzo M, et al. Tackling NCDs: a different approach is needed. Lancet 2012; 379[9829]: 1860-1861.
- Starfield B. The hidden inequity in health care. Int J Equity Health 2011; 10: 15.
- 10. De Maeseneer J, van Driel M, Green L, van Weel C. The need for research in primary care. Lancet 2003; 362(9392): 1314-1319.
- 11. Heath I, Rubinstein A, Stange K, van Driel M. Quality in primary health care: a multidimensional approach to complexity. BMJ 2009; 338: b1242.
- 12. World Health Organization. International classification of functioning, disability and health (ICF). Geneva: WHO, 2001.
- 13. Rhyne R, Bogue R, Kukulka G, Fulmer N. Community-oriented primary care: health care for the 21st century. Washington, DC: American Public Health Association, 1998.
- 14. De Maeseneer J, Willems S, De Sutter A, et al. Primary health care as a strategy to achieve equitable care: a literature review commissioned by the Health Systems Knowledge Network. Geneva: WHO, 2007. http://www.who.int/social\_determinants/reso urces/csdh\_media/primary\_health\_care\_2007 \_en.pdf (accessed 21 May 2012).
- 15. Frenk J, Chen L, Bhutta Z, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. Lancet 2010; **376(9756):** 1923-1958.